

# m906

5.1 and stereo monitor controller

high fidelity 5.1 and stereo monitor control for recording, mastering, film, broadcast and post.



The landscape of pro audio has changed. Computer based audio production has greatly reduced the need for large format recording consoles, minus one part: the master section. This progression has created a need for a whole new genre of products - the monitor controller, of which there are many offerings, from simple to full featured. Grace Design proudly offers the pinnacle: the m906 high fidelity 5.1 monitor controller.

The main idea behind the m906 was to provide high fidelity level control for engineers working with 5.1 surround playback systems. But from there, we got blissfully carried away and ultimately obsessed with producing the most full featured and highest quality monitor controller available.

At its core, the m906 is a purist level control for monitoring surround (or stereo) audio sources. But a closer look reveals a highly intelligent feature set that makes it a vital nerve center for any recording, mastering, or post facility centered around a digital

audio workstation. It is configured as a 2U rack mount mainframe controlled by a sleek, powerful desktop remote control, with all audio kept in the mainframe and all control via the remote control.

The m906 offers a full complement of balanced and unbalanced analog 5.1 and digital 5.1 and stereo inputs, the latter featuring our latest generation reference 24bit/192kHz DAC technology with our proprietary s-Lock™ PLL for rock solid digital stability (more info can be found in the technical discussion). All inputs and outputs on the m906 can be user calibrated for seamless integration into any playback environment with all types of playback equipment.

The m906's signal path is designed to deliver nothing short of the best performing, transparent audio available. All components are chosen for audiophile performance and long term reliability. Level controls, the heart of a monitor controller, are low distortion precision devices which provide a 100dB range in silent .5dB steps.

Included as a standard feature is our acclaimed reference headphone amplifier circuitry (from our m902), with one output jack on the mainframe and one additional output on the remote. This unique circuitry provides precision headphone amplification for critical monitoring, mixing and mastering.

While the m906 boasts a remarkably full set of features, the real achievement for us is to offer this while maintaining the impeccable, transparent audio performance for which all of our products are famous. In its few short years in production, the m906 has found a home in countless of the world's premier audio production, HD production, broadcast, post and mastering facilities.

The m906 is here to empower audio professionals with the highest performance and most comprehensive feature set that any surround monitor control system has to offer.

- multiple 5.1 and stereo analog inputs
- 24bit/192kHz digital 5.1 and stereo inputs- AES3, S/PDIF, ADAT and TOSLINK
- s-Lock™ phase lock loop sample clock regeneration for ultra-low jitter and rock solid digital stability
- precision speaker and headphone level controls with a 100dB range in 0.5dB steps
- every electrical and mechanical design element maximized for absolute purist audiophile performance
- all controls are built into an elegant, convenient desktop remote control unit
- all I/O and audio are routed in a 2U rack mount mainframe powered by an external 1U 1/2 rack power supply
- control up to three speaker systems - two 5.1 or up to three stereo
- m902 style high-current audiophile headphone amplifier built in with one output on remote control unit and one on the mainframe unit
- complete system level calibration (inputs, outputs, inter-channel balance, dim) and individual channel solo/mute
- balanced talkback microphone input and activation switch with additional external foot switch control jack
- fixed level 5.1 DAC output for direct audio transfers
- optional downmix module supports all standard Dolby mix ratios
- optional AES Loop-thru feature provides four AES digital outputs for passing signals to other devices downstream
- five year transferable warranty on parts and labor

## SPECIFICATIONS ANALOG IN

	THD+N (@ 0dB gain, 1kHz)	<0.001% (0.00075% typical) <0.003% (0.001% typical)
@+20dBu out @0dBu out	Frequency Response	3Hz - 250kHz
+/-3dB	Dynamic Range	112dB
20-22kHz bandwidth	Output Noise (20-22kHz bandwidth, -20dB gain)	-86dBu -96dBu
High gain mode Low gain mode	Output Noise (A weighted, -20dB gain)	-91dBu -99dBu
High gain mode Low gain mode	Phase Deviation	< 4°
20Hz to 20kHz	Crosstalk any channel	< 100dB
1kHz	Balanced Input CMRR	> 60dB >75dB >60dB
60Hz 1kHz 10kHz	Gain Range	-105.5dB to +20dB -95.5dB to +30dB
Low gain mode (0.5dB steps) High gain mode (0.5dB steps)	Channel Tracking Accuracy	+/-0.05dB
Any channel	Maximum Output Level	+15dBu +27dBu
Low gain mode (balanced) High gain mode (balanced)	Maximum Input Level	+30dBu +20dBu
Balanced inputs Unbalanced inputs	Impedance	30k Ohms 50k Ohms 300 Ohms 300 Ohms
Balanced inputs Unbalanced inputs Balanced outputs Minimum load impedance		

## D/A CONVERTER FIXED OUTPUTS

	THD+N	0.002%
1kHz, -1dBFS, 20-22kHz bandwidth	Dynamic Range	>111dB
20-22kHz bandwidth	Input Lock Range	32kHz to 192kHz 32kHz to 96kHz 30kHz 55kHz <25ps 44.1, 48, 88.2, 96, 176.4, 192kHz
AES3 / S/PDIF TOSLINK ADAT LIGHTPIPE™ s-Lock™ Sample Clock Intrinsic Jitter s-Lock™ Supported Sample Rates		

## POWER SUPPLY / GENERAL

Power consumption	40W
Input Voltage 50-60Hz	100, 120, 220, 230-240VAC
Main chassis IEC 2U Remote control unit Power supply unit	Dimensions H3.5" x W19" x D10.5" H1.6" x W8" x D5.25" H1.7" x W8.5" x D8.5"
Main chassis Remote control unit Power supply unit	Weight 14.1lbs / 6.4kg 2.3lbs / 1kg 6.5lbs / 2.9kg

